BeAGLE updates & the ePb paper

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BeAGLE Changes for e+Pb/Au

- BeAGLE ready to use with Pythia tune!
  - Included Elke's Pythia change: PARJ(170) controls remnant cluster breakup, not PARJ(21) which is now only string fragmentation p_T.
  - Parton showering (MSTP(61),MSTP(71)) is no longer turned off by BeAGLE.
- Liang's low E fix should be applied to Pythia.
  - ...PACKAGES/BeAGLE/PYTHIA-6.4.28/pygaga.f can be used directly in Pythia.
- Only other differences are understood:
  - pysigh.f, pysspa.f & pyxtot.f & pypdfu.f

Other BeAGLE/Pythia differences

- Harmless additional variable NSIDE
  - pysigh.f & pysspa.f could be copied from BeAGLE to Pythia.
- Different handling of isospin/nucleon remnants
  - pypdfu.f is different in a non-trivial way.
- BeAGLE can control vector mesons 1-by-1.
  - pyxtot.f is different.

Final Pythia/BeAGLE tune

- Use Mark's pdf:
  - MSTP(51)=10042,MSTP(52)=2 & nuclpdf: 101
- Use/tweak Mark's: MSTP(94)=2,PARP(97)=6.0
- Use HERMES/Elke for all else
  - INCLUDING PARP(91) (intrinsic kT) and PARJ(21) (String frag. pt)
- Tune (reduce) the value of PARJ(170) to match the forward proton pT values from ZEUS.
  - If PARJ(170) is very small, we may prefer to reduce PARP(91) a bit so that PARJ(170) can be more reasonable. But leave PARJ(21) as per HERMES.